35

Patent Claims

- 1. A field transmitter for process automation having a
- 5 control device for data input and display, wherein the
 - control device B is in the form of a separately portable unit, and control device B and field transmitter S1 are linked by radio,
- 10 the radio link being limited to the local area surrounding the field transmitter S1.
- The field transmitter as claimed in claim 1, wherein the radio link is effected on the basis of the Bluetooth standard.
 - 3. The field transmitter as claimed in one of the preceding claims, wherein the field transmitter S1 has a microprocessor P connected to a Bluetooth chipset SE,
- 20 and wherein the control device B likewise has a microprocessor P1 which is connected to a corresponding Bluetooth chipset SE1.
- 4. The field transmitter as claimed in one of the preceding claims, wherein an antenna connection is provided on the housing of the field transmitter S1.
- 5. The field transmitter as claimed in one of the preceding claims, wherein the field transmitter S1 is used for recording a process variable.
 - 6. The field transmitter as claimed in one of the preceding claims, wherein the field transmitter S1 is connected to a central control unit PLS by means of a field bus FB.
 - 7. The field transmitter as claimed in one of the preceding claims, wherein the data transmission rate

15

between field transmitter S1 and control device B is approximately 1 Mbit/sec.

- 8. The field transmitter as claimed in claim 7, wherein the control device B is a portable computer (laptop).
- 9. The field transmitter as claimed in claim 7, wherein the control device B is a portable miniature 10 computer (palmtop).
 - 10. The field transmitter as claimed in claim 7, wherein the control device B is a portable handheld appliance.
 - 11. The field transmitter as claimed in claim 7, wherein the control device B is a portable radio telephone (mobile).
- 20 12. A method for controlling a field transmitter as claimed in claims 1 to 11, wherein the control device is used to transmit software changes (updates/upgrades) to the field transmitter S1.
- 25 13. A method for controlling a field transmitter as claimed in claims 1 to 11, wherein the control device B is used to initiate a recurrent test on the field transmitter S1.
- 30 14. A method for controlling a field transmitter as claimed in claims 1 to 11, wherein the control device B is used to make a status query for the purpose of predictive maintenance of the field transmitter S1.